

CLAIMS

1. A dye-sensitized solar cell, comprising:
 - a first substrate having a light-transmitting property;
 - a semiconductor electrode containing a sensitizing dye and arranged in such a manner that a first surface of the semiconductor electrode faces the first substrate;
 - a first collector electrode arranged on a second surface of the semiconductor electrode;
 - an insulating layer arranged in contact with the first collector electrode;
 - a catalytic electrode layer arranged in such a manner that a first surface of the catalytic electrode layer faces the insulating layer;
 - a second substrate arranged on a second surface of the catalytic electrode layer; and
 - an electrolyte material incorporated in the semiconductor electrode, the first collector electrode and the insulating layer.
2. The dye-sensitized solar cell according to claim 1, wherein the second substrate is made of ceramic and/or metal.
3. The dye-sensitized solar cell according to claim 1 or 2, wherein the semiconductor electrode is prepared from titanium oxide.
4. The dye-sensitized solar cell according to any one of claims 1 to 3, wherein the first collector electrode is in the form of a porous layer.
5. The dye-sensitized solar cell according to any one of claims 1 to 3, wherein the first collector electrode has a planar configuration in a grid pattern, comb pattern or radial pattern.
6. The dye-sensitized solar cell according to any one of claims 1 to 5, further comprising a second collector electrode between the second substrate and the catalytic electrode layer.

7. The dye-sensitized solar cell according to claim 6, wherein the second collector electrode has a planar configuration in a sheet form or in a grid pattern, a comb pattern or a radial pattern.